

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

In the Matter of )

)  
Amendment of Part 90 of the )  
Commission's Rules to )  
Facilitate Future Development )  
of SMR Systems in the 800 MHz )  
Frequency Band )

PR Docket No. 93-144  
RM-8117, RM-8029  
RM-8030

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

To: The Commission

COMMENTS OF FLEET CALL, INC.

FLEET CALL, INC.

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## **SUMMARY**

Fleet Call, Inc. ("Fleet Call") is pleased to support the Federal Communications Commission's (the "Commission") proposal to facilitate development of advanced, wide-area 800 MHz Specialized Mobile Radio ("SMR") systems. The Commission proposes creating a new type of 800 MHz SMR authorization, the "Expanded Mobile Service Provider" ("EMSP") license. It would enable a licensee to aggregate and reuse channels throughout large commercially-linked regions without regard to current restrictions on channel assignments or minimum loading. This would permit more efficient licensing of 800 MHz wide-area SMR systems and facilitate creation of the ubiquitous, advanced SMR networks necessary to meet the public's demand for competitive, high-quality mobile communications services.

As a pioneer in developing digital, wide-area SMR systems, Fleet Call agrees that a wide-area licensing program is necessary to promote the most efficient use of 800 MHz spectrum in both congested and rural areas, facilitate technically-advanced systems and support creation of seamless advanced SMR networks. The proposed EMSP licensing program meets these objectives and should be expeditiously adopted.

Fleet Call supports using the 47 Rand-McNally Major Trading Areas ("MTAs") as the EMSP licensing areas. By definition, the MTAs incorporate areas with substantial commercial, business and other regional economic ties. Each includes at least one

significant metropolitan area and are large enough to permit SMR entrepreneurs to meet their customers' needs for wide-area coverage with the economies of scale and large population necessary to support investments in advanced technology.

Fleet Call also supports limiting initial EMSP licensing eligibility to existing 800 MHz SMR licensees in each MTA. SMR systems already occupy all of the 800 MHz SMR channels in a number of major markets. As a result, a new entrant having to protect existing systems could not provide true wide-area service. Given the existing SMR environment, the public interest in fostering spectrally-efficient wide-area SMR service can best be realized by allowing existing licensees the first opportunity to expand their systems throughout the MTA.

In addition, permitting existing licensees to expand on an MTA-wide basis will reduce administrative licensing costs and delay. It will also maximize the likelihood that bona fide operators with the experience, financial and managerial resources necessary to expeditiously create wide-area systems obtain EMSP licenses on already-in-use channels.

Fleet Call emphasizes that an EMSP licensee must be required to protect the individual base stations of currently-authorized wide-area SMR systems and the proposed sites of pending wide-area applications. In addition, licensees of granted but unconstructed wide-area stations should be able to include those frequencies in their EMSP applications, consistent with current wide-area licensing policies.

EMSP licensees should be required to utilize technology at least six times more efficient than today's analog SMR systems. This is a reasonable requirement in return for the exclusive right to reuse large number of frequencies throughout an entire MTA.

Fleet Call recommends permitting consideration to pass among negotiating parties with mutually exclusive applications to better facilitate their settlement. It would also require that the proposed construction escrow or performance bond for EMSP applicants be a precondition to inclusion in the lottery selection process for mutually exclusive EMSP applications -- thereby further assuring that only sincere applicants are selected.

Fleet Call supports the proposed construction standard for EMSP systems, but submits that no restrictions on transferability of EMSP licenses are necessary for existing licensees of constructed and operational facilities that obtain EMSP authorizations. Under these circumstances, anti-trafficking provisions are not necessary and would impede economic business decisions.

Finally, Fleet Call recognizes the importance of effective co-channel interference standards in the development of EMSP systems and their coexistence with co-channel licensees both within and outside the MTA. The Commission should retain its existing SMR co-channel separation requirements, as discussed herein, while it develops more reliable data and propagation models to protect the real world performance of digital EMSP operations.

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COMMENTS OF FLEET CALL, INC.

I. INTRODUCTION

Fleet Call, Inc., ("Fleet Call"), pursuant to Section 1.415 of the Rules and Regulations of the Federal Communications Commission (the "Commission"), hereby respectfully submits its Comments in response to the Notice of Proposed Rulemaking (the "Notice") in the above-captioned proceeding.<sup>1/</sup>

Fleet Call supports the Commission's proposal to establish an Expanded Mobile Service Provider ("EMSP") license to facilitate the development of advanced, wide-area 800 MHz Specialized Mobile Radio ("SMR") communications systems. As proposed, an EMSP licensee could reuse its authorized SMR Category frequencies throughout each of the 47 Rand McNally Major Trading Areas ("MTAs") or alternatively, each of the 487 Basic Trading Areas ("BTAs"), so long as it provides interference protection to existing co-channel systems. An EMSP licensee would be able to reuse its channels

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<sup>1/</sup> 8 FCC Rcd 3950 (1993).

without regard to current restrictions on applying for more than five channels at a time or establishing minimum loading. It could add stations or modify existing stations by obtaining conditional operating authority upon completing a "self-coordination" procedure. Thus, an EMSP licensee would have great flexibility to deploy and reuse its channels within a large area to provide valuable mobile communications services.

Accordingly, as discussed below, the expeditious adoption of EMSP licensing, with the modifications recommended herein, is in the public interest. It will enable the Commission to assign 800 MHz SMR spectrum more efficiently and thereby facilitate the ability of SMR entrepreneurs to create the ubiquitous, advanced, wide-area wireless communications services necessary to provide the public with competitive mobile communications choices.

## II. BACKGROUND

Fleet Call was the first SMR licensee to seek and obtain authority to implement advanced, wide-area digital mobile communications systems. On February 13, 1991, the Commission authorized Fleet Call to construct and operate 800 MHz Enhanced Specialized Mobile Radio ("ESMR") systems in Chicago, Dallas, Houston, Los Angeles, New York and San Francisco.<sup>2/</sup> These ESMR systems incorporate innovative state-of-the-art technology, including digital speech coding, Time Division Multiple Access

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<sup>2/</sup> In Re Request of Fleet Call, Inc. for Waiver and Other Relief to Permit Creation of Enhanced Specialized Mobile Radio Systems in Six Markets, 6 FCC Rcd 1533 (1991) (the "Fleet Call Waiver Order"), recon. den. 6 FCC Rcd 6989 (1991).

("TDMA") transmission and frequency reuse to create in excess of 15 times the customer capacity of existing SMR systems while providing improved transmission quality and coverage and enhanced services. Fleet Call's first ESMR system will begin service in Los Angeles next month followed by San Francisco in early 1994.

As the pioneer in developing digital, wide-area systems, Fleet Call has a substantial interest in the outcome of this proceeding. The Notice is responsive to Fleet Call's continuing interest in promoting the development of wide-area SMR systems,<sup>3/</sup> as well as petitions and initiatives suggested by other industry parties advocating simpler and more effective wide-area licensing.<sup>4/</sup>

The rules that fostered the SMR industry's success in providing high quality services to the public at low cost -- while sufficiently flexible to permit conversion of existing analog SMR systems to wide-area systems using digital technology -- are impeding evolution of SMR systems capable of meeting the mobile communications needs of customers in the 21st century. This is the decade of wireless communications networks. Cellular systems, mobile data networks, paging systems and mobile satellite services

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<sup>3/</sup> On April 2, 1992, Fleet Call filed a Petition for Rulemaking proposing that the Commission aggregate "innovator blocks" of a maximum of 105 and a minimum of 42 unlicensed 800 MHz SMR channels in each Metropolitan Statistical Area ("MSA") and license them using competitive bidding. See Policies and Rules for Licensing Follow 800 MHz Specialized Mobile Radio Spectrum Through a Competitive Bidding Process, RM-7985, Petition for Rulemaking of Fleet Call, Inc., filed April 22, 1992 (the "Innovator Block Petition").

<sup>4/</sup> See e.g., RM-8117, Petition for Rulemaking of the American Mobile Telecommunications Association, filed October 26, 1992 (the "AMTA Blueprint").



are moving rapidly to develop nationwide seamless service offerings. At the same time, the Commission is considering a regulatory structure for Personal Communications Services ("PCS") capable of linking various communications networks to provide ubiquitous wireless communications services.<sup>5/</sup> The SMR industry must compete with these other wireless communications providers in offering the kind and scope of services customers desire.

The Notice recognizes that the existing SMR regulatory structure has accommodated the conversion of existing analog SMR systems in the major markets into higher capacity, wide-area digital systems.<sup>6/</sup> The rules have not been as effective, however, in stimulating the provision of SMR service in secondary markets. Their smaller population has made it more difficult to obtain the channels needed to support investments in advanced systems -- thus denying customers the benefits of competitive innovation. Moreover, the five-channel assignment limitation of Section 90.621, and the 40-Mile Rule,<sup>7/</sup> prevent applicants from acquiring sufficient channels in the secondary markets to risk the capital necessary to construct digital, wide-area systems.

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<sup>5/</sup> Amendment of the Commission's Rules to Establish New Personal Communications Services, 7 FCC Rcd 5676 (1992).

<sup>6/</sup> Notwithstanding this flexibility, the Notice observes that more efficient licensing processes are necessary to reduce the administrative burden of site-by-site licensing of wide-area systems. See Notice at paras. 8, 18.

<sup>7/</sup> Section 90.627 of the Commission's Rules prevent a licensee from having more than one unloaded 800 MHz trunked SMR station within 40 miles of each other.

This is particularly true in areas where population and

### III. DISCUSSION

#### A. EMSP Market Definition

The Notice proposes that the markets for EMSP licenses be defined by either the Rand McNally MTAs or BTAs. To date, applicants for wide-area SMR systems have defined the market for each authorization based on the existing coverage or "footprint" of their constructed and operational analog SMR systems in the general vicinity of a major metropolitan area. Establishing Commission-prescribed licensing areas will promote the expeditious growth of advanced, wide-area systems and facilitate creation of a ubiquitous digital SMR network in the United States.<sup>9/</sup>

The Commission is currently considering using MTAs for the post-Phase I licensing of 900 MHz SMR systems.<sup>10/</sup> As demonstrated in that proceeding, the 47 MTAs offer a desirable approach for wide-area SMR systems. Each MTA includes at least one significant metropolitan area, plus surrounding commercially-related areas.<sup>11/</sup> The MTAs are large enough to enable entrepreneurs to meet their customers' needs for regional service coverage and offer the economies of scale and quantum of population necessary to support the investment required to initiate advanced

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<sup>9/</sup> This approach has been fundamental in enabling the licensing of cellular radio systems throughout the Nation.

<sup>10/</sup> Amendment of Parts 2 and 90 of the Commission's Rules to Provide for the Use of 200 Channels Outside the Designated Filing Areas in the 896-901 MHz and 935-940 MHz Bands Allotted to the Specialized Mobile Radio Pool, First Report and Order and Further Notice of Proposed Rulemaking, 8 FCC Rcd 1469 (1993) at para. 17.

<sup>11/</sup> By definition, an MTA inherently incorporates areas with significant commercial, business and other regional economic ties.

technology systems. In short, the public's interest in the prompt availability of advanced services will be better served by the reduced administrative burden of licensing EMSP systems for 47 MTAs rather than nearly 500 BTAs. Minimizing the administrative burdens associated with the processing of 800 MHz wide-area SMR systems is one of the Commission's primary objectives in this proceeding.<sup>12/</sup>

Moreover, the public interest is best served by EMSP licensing that directly builds on the success of existing 800 MHz SMR licensees. It permits these licensees to build out wide-area systems around the areas in which they already operate to better serve existing customers. This is the optimum EMSP licensing approach given that 800 MHz SMR spectrum is already fully licensed in most of the major metropolitan areas. For the initial licensing of new services, such as PCS, the diversity of smaller licensing areas, such as MSAs, benefits the public.<sup>13/</sup> For the mature 800

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<sup>12/</sup> Notice at para. 8.

<sup>13/</sup> For example, using smaller MSA (and Rural Service Area or "RSA") licensing areas for PCS provides a familiar referent for licensees, the mobile communications industry, regulators and the financial community. It assures greater entry opportunities for new and diverse services and service providers appropriate for a new service. Licensing PCS operators for smaller markets preserves essential flexibility for marketplace forces to determine optimum market size through consolidations and combinations of licensing areas in response to service characteristics, customer needs and changing demand. Moreover, MSA/RSA licensing areas are well-matched to the technical and market characteristics of the microcellular systems that the Commission intends to foster through its 2 GHz PCS reallocation. See Amendment of the Commission's Rules to Establish New Personal Communications Services, Gen. Docket No. 90-314, Reply Comments of Fleet Call, Inc., filed January 8, 1993.

MHz SMR industry, however, authorizing existing licensees to expand on an MTA-wide basis will minimize administrative costs and delay, and streamline the provision of advanced wide-area services to the public.

A primary objective of this proceeding is to facilitate the development of wide-area SMR systems throughout the country.<sup>14/</sup> MTA-based EMSP licensees could readily join with existing constructed advanced SMR systems to create a nationwide service capability. In addition, MTA-wide EMSP licensees will be better positioned to compete with regional cellular operators, PCS providers, 900 MHz wide-area systems and other wide-area mobile communications systems.

The Commission states that an EMSP licensee would be able to construct its channels anywhere it chooses within its MTA, provided that it protects existing co-channel systems. The Commission should make clear that an EMSP licensee must protect the individual base stations of currently-authorized wide-area SMR systems, such as Fleet Call's ESMR networks. The Commission has granted applications for advanced, wide-area SMR systems in a number of major markets and waived the one-year construction period for trunked SMR channels to allow five years to complete construction of these systems. Given the complexity and scope of these advanced systems, as well as the ongoing development of digital SMR infrastructure, most are not yet constructed. EMSP licensees must

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<sup>14/</sup> Notice at paras. 7-9.

be required to protect all authorized wide-area systems.15/

### **B. Eligibility for EMSP Licenses**

The Notice proposes a two-stage authorization process for EMSP licenses. First, the Commission would establish a filing window during which any applicant (or consortium of applicants) licensed on one or more SMR Category channels in the MTA<sup>16/</sup> as of May 13, 1993 could apply for an EMSP license to reuse throughout the MTA all channels that operate on constructed and operational base stations as of the date the EMSP application is filed.<sup>17/</sup> The Notice states that "the public would benefit from a more viable and expeditiously provided EMSP service by permitting existing licensees first to convert their existing systems to wide-area operations . . . ." <sup>18/</sup> Subsequently, the Commission would accept on a first-come, first-served basis applications for all SMR Category channels not assigned to EMSP applicants in the initial

15/ In addition, an EMSP licensee should be required to protect the proposed sites of any applications for advanced wide-area systems pending at the time such EMSP application is filed. The Notice appears to contemplate this approach. See Notice at para. 7 and proposed Section 90.661(a).

16/ The Notice refers to "BTA/MTA" in light of the Commission's proposal of alternative market definitions. For simplicity, Fleet Call will use the term "MTA" or "MTAs" to refer to the EMSP licensing areas, consistent with its comments herein.

17/ Notice at para. 24. The Commission proposes that only

filling window. In this round applicants could apply for wide-area

would be foreclosed from operating in the major metropolitan areas of the MTA -- thereby effectively undercutting the economic viability of their EMSP systems. Taking into account the existing SMR environment, the Commission's objective of fostering spectrally-efficient wide-area SMR systems can best be achieved by granting existing licensees the first opportunity to expand their existing systems throughout the EMSP market area. This will maximize the likelihood that bona fide operators with the experience, financial and managerial resources necessary to expeditiously create wide-area systems obtain EMSP licenses on already-in-use channels.

Moreover, existing licensees are well-positioned to increase spectrum efficiency by aggregating and further reusing their constructed and operational frequencies at both existing sites and at new sites throughout the EMSP. They could build out wide-area systems around the areas in which they are already licensed in order to better serve existing customers. Existing licensees "know the market" and can bring operational experience, backbone infrastructure (particularly new digital systems) and potential spectrum efficiency and technological innovation to most effectively make use of spectrum granted pursuant to an EMSP authorization.

Consistent with these considerations, the Commission should permit licensees of granted but unconstructed wide area stations to count those frequencies as constructed for purposes of an EMSP



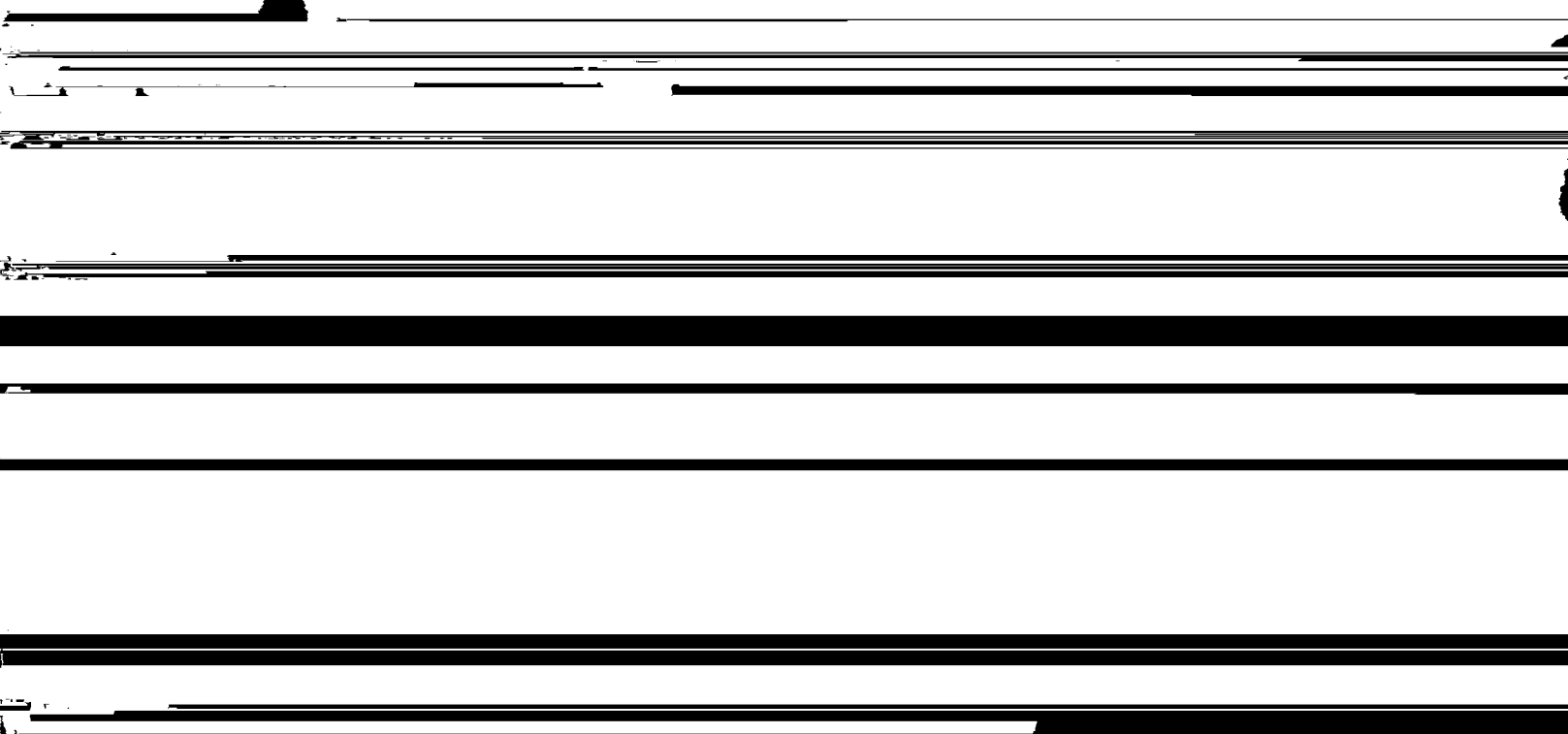
license.<sup>21/</sup> The Commission currently permits ESMR and other wide-area SMR system licensees to reuse their constructed and operational frequencies throughout a designated geographic area, subject to providing the required interference protection for non-affiliated existing co-channel systems, provided these existing systems are fully loaded on an aggregate basis.<sup>22/</sup> The

throughout its current wide-area system. In this way, it will further advance the Commission's objective of easing the SMR industry's transition to wide-area networks.

C. EMSP Technology

In the Notice, the Commission tentatively concludes that it is not "necessary or appropriate" to require EMSP licensees to use advanced technology in constructing their EMSP-authorized facilities.<sup>25/</sup> Fleet Call respectfully disagrees and recommends that EMSP licensees be required to utilize technology that is six times more efficient than today's analog SMR transmission technology.<sup>26/</sup> A commitment to a six-times analog efficiency gain is a reasonable requirement in return for the exclusive right to use large numbers of frequencies throughout an entire MTA. Moreover, this technology is available today and is rapidly becoming the de facto standard for compatibility with the emerging digital mobile SMR roaming network.

Fleet Call recognizes that this technology may not be



competition with the nationwide mobile communications networks being implemented by cellular radio providers. In Fleet Call's view, the Commission's far-sighted desire to facilitate creation of competitive, ubiquitous wide-area SMR services will be seriously compromised by the absence of an advanced technology requirement for EMSP licenses.

D. EMSP Licensing Process

1. Consideration

As discussed above, the Notice proposes an initial 30-day window in which existing licenses can apply to reuse throughout the MTA their constructed and operational channels within the MTA as of the date of the EMSP application.<sup>27/</sup> Existing licensees could join a consortium of other licensees within the MTA to file an EMSP application.<sup>28/</sup> After the close of the filing window, qualified applications that are not mutually exclusive would be granted. Mutually exclusive applicants would have a 60-day period to negotiate settlements of mutually exclusive applications. If a full market settlement is not achieved, the Commission would randomly rank order all mutually exclusive applications within the MTA and grant licenses accordingly.

The Notice proposes that no consideration be permitted among negotiating applicants in exchange for agreement to withdraw or

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<sup>27/</sup> See Notice at para. 25. As discussed above, Fleet Call recommends that these applicants be able to include unconstructed frequencies authorized by existing wide-area system licenses.

<sup>28/</sup> An EMSP license granted to such coalition applicant would enable its members to reuse the eligible channels of each applicant throughout the MTA.

amend pending mutually exclusive EMSP applications.<sup>29/</sup> The Commission's objective in allowing mutually exclusive parties to negotiate settlements, i.e., reducing the need to conduct lotteries (or auctions), is hamstrung by prohibiting consideration as part of a settlement arrangement. Negotiating parties should be free to exchange cash, an interest in the surviving party's proposed system, or such other "consideration" as they agree upon to resolve mutually exclusive EMSP applications. Permitting consideration will facilitate full-market settlements and the expeditious award of EMSP licenses. Fleet Call believes that the eligibility, construction and performance requirements discussed in the Notice, and as expanded upon herein, will minimize opportunities for speculation and assure that bona fide applicants obtain initial EMSP authorizations.

## 2. Escrow and Performance Bonds

The Notice proposes providing EMSP lottery selectees an extended implementation period of five years to construct,<sup>30/</sup> provided that the licensee escrow funds equal to its estimated costs of completing construction or obtain a performance bond in that amount.<sup>31/</sup> This is intended to further deter speculation

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<sup>29/</sup> Notice at para. 27.

<sup>30/</sup> Construction is defined as 40 dBu coverage of 80 percent of either the population or area of the MTA. Notice at para. 39. The proposed construction standard is discussed in Section III(E), below.

<sup>31/</sup> If the licensee does not meet these requirements, the standard one year to construct trunked SMR systems applies.

and warehousing of scarce 800 MHz SMR spectrum.32/ This objective would be enhanced, as well as further protection against speculation, by requiring delivery of the escrow or performance bond after the conclusion of the 60-day negotiation period -- but prior to conducting the lottery among mutually exclusive applications. This would give additional incentives to mutually exclusive applicants to negotiate settlements.33/

### 3. System Design Plan

Fleet Call suggests that EMSP applicants be required to file, as part of their applications, a proposed system design plan demonstrating how the applicant would comply with the EMSP

identify, prior to the negotiating period, applicants that, because of existing co-channel facilities, cannot as a practical matter meet the construction standard. It would also provide a basis for evaluating the applicant's cost estimates and implementation plan - - thereby providing another means of assuring that only legitimate, qualified applicants receive full licensing consideration.

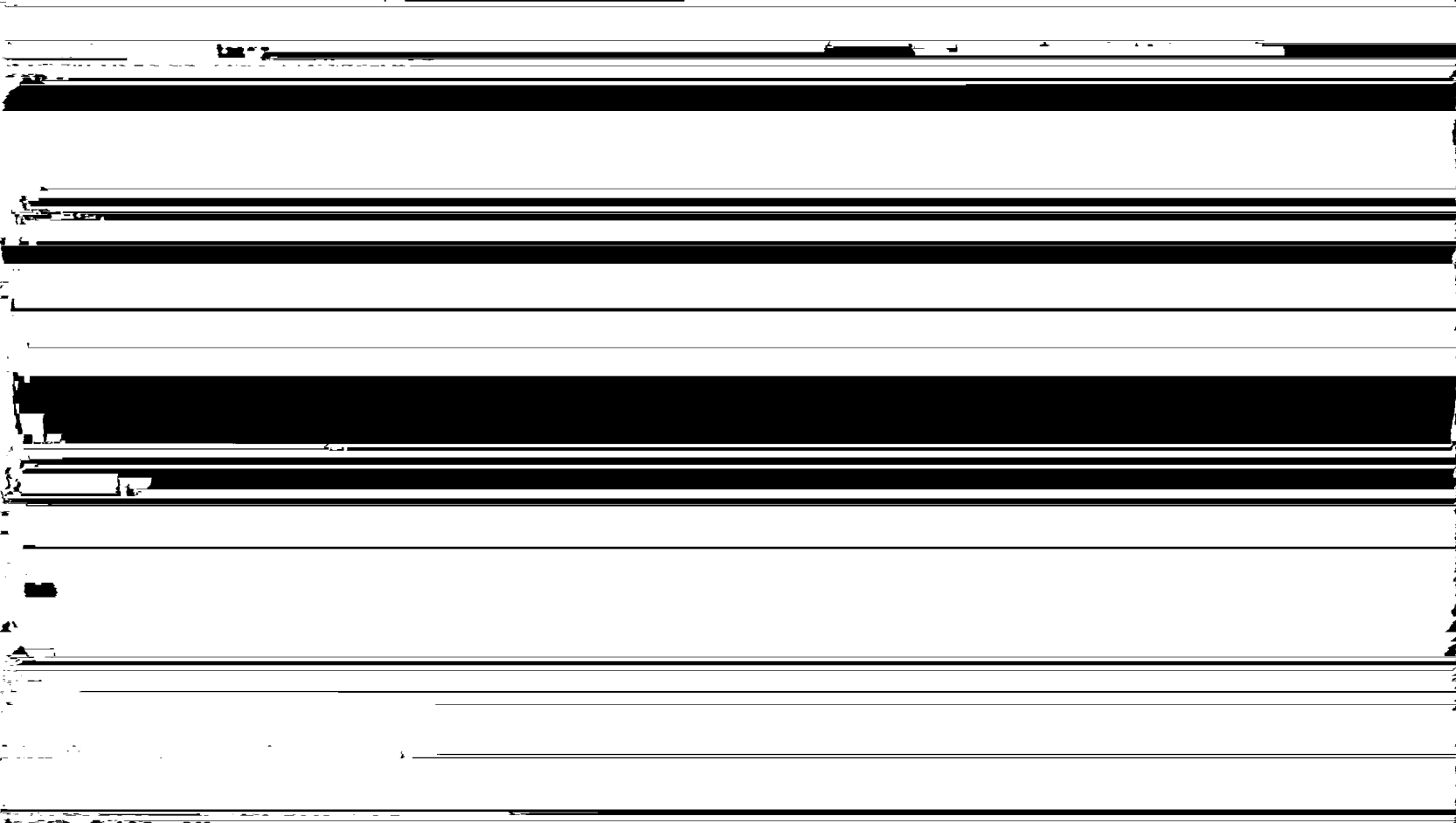
E. Construction Requirements/Transferability Restrictions

As noted above, the Commission proposes that 800 MHz EMSP licensees have up to five years to cover either 80 percent of the

limiting initial EMSP eligibility to existing licensees with proven qualifications, as discussed above, renders intermediate construction benchmarks unnecessary and unwarranted.<sup>35/</sup>

The Notice proposes not permitting assignments of EMSP licenses for at least three years. It also proposes prohibiting assignment of licenses for unconstructed EMSP systems. Partial assignments of a portion of an EMSP licensee's channels within an MTA would be permitted upon completion of construction.

Fleet Call fully supports rules designed to prevent trafficking in Commission authorizations. Such transfer restrictions should be applied to new entrants licensed in the second stage of EMSP authorizations. Fleet Call respectfully submits, however, that existing licensees of constructed and operational SMR systems that obtain EMSP grants have already placed



significant consolidation. New digital technologies and the explosion in demand for mobile communications have made SMRs part of a dynamic mix of entities able to provide state-of-the-art wireless communications services. EMSP licensees should not be restricted in making business judgements as to their participation in this dynamic marketplace. Accordingly, the Commission should not impose any restrictions on the transferability of EMSP authorizations held by existing licensees.

F Co-Channel Interference Protection



licensee's region not exceed 22 dBu. EMSP licensees in the adjacent MTA would also be required to meet the 22 dBu field strength limit at the common border.<sup>39/</sup> Thus, determination of appropriate co-channel interference separation requirements involving advanced (digital) wide-area SMRs are an integral part of the EMSP rulemaking and should be determined in this or a subsequent related proceeding.<sup>40/</sup>

Fleet Call believes that a 22 dBu (50,10) contour requirement at the EMSP border will make it impossible to serve highways and major population areas near the border. This results from the fact that the 40 dBu service contour of an SMR site, which is generally accepted as the satisfactory service area for that transmitter, is significantly smaller than the 22 dBu contour. For example, the 40

